

461 Midterm Review

Exam Format

- Same time: Wed. 3:30-4:50 p.m.
- Closed book
- Calculators encouraged, nothing fancy
- Essay questions
- Up to and including Ch 4.2
- Lectures are a good guide for prep
- Don't cheat

Layering, Bits and BW

- Layering, encapsulation, headers, payloads, MTUs, etc.
- Encodings
- Propagation and transmission delays, BW delay product, latency and RTT, throughput

Framing and Errors

- Error detection vs. correction
- Parity, 2D parity
- Checksums and CRCs
- Stop and Wait vs. Sliding Window

Multiple Access

- FDMA vs. TDMA vs. CDMA
- CSMA, p-persistence, CSMA/CD
- Ethernet, binary exponential backoff
- 802.11, CSMA/CA

Switching and Bridges

- Learning bridges
- Spanning Trees

IP

- Service model
- Addresses (e.g., vs. Ethernet)
- Subnetting
- Forwarding
- Fragmentation/Reassembly
- ARP, DHCP

Routing

- Distance Vector vs Link State
- Count-to-infinity
- Split horizon
- Poison reverse